and culverts swept into lake; rivers in this vicinity not as high since 1837. Alliance, Stark Co. Ohio, creeks overflowed; lowlands deluged. At Minerva, Ohio, the water rose to a depth equal to the great flood of 1861. Cleveland Ohio, 13th, houses flooded. Erie Pa., 12th, 13th, Mill creek overflowed; dams, culverts and bridges swept away. Oswego, N. Y., 14th, 100 feet of pier on east side of harbor washed away. In Ontario, Sept. 13th, at Oakville, considerable damage by floods and wash-outs. St. Catharines, lower half of Welland canal entirely submerged; navigation suspended until 23d. Markham, heaviest flood since 1851—bridges on river Rouge carried away—Toronto and Nipissing rail-road badly washed. In Scarboro and Toronto Cos., nearly all bridges were swept away. At Brantford, Sept. 15th, large amount of property destroyed by flood. W. Brantford, entirely submerged; iron bridge across Grand river gave way. At Galt, Grand river overflooded banks, doing much damage.

Drought—Corsicana, Tex., 30th, recent rains have relieved the drought in some sections, while in others farmers are compelled to drive their stock many miles to water. Independence, Kan., 30th, corn crop severely injured by drought. Lebanon, Mo., 25th, tobacco crop almost a failure. Contoocookville, N. H., 30th, streams lower than ever before for many years, many wells have failed.

Hail.—Winnemucca, Nev., 16th; Pike's Peak, 1st, 2d, 8th, 19th, 30th; Stockton, Tex., 18th; Milwaukee, 25th; Chicago, 25th; Toledo, 2d; Logansport, Ind., 24th; Fort Hays, Kan., 19th; Camp Douglass, Utah, 18th; Fort Fred. Steele, Wy. Ty., 8th; Summitt, Col., 6, 18th; Geneseo, Ill., 24th; Milford, Ind., 25th; Guttenburg, Iowa, 19th, 25th; Litchfield, Mich, 2d; Frankfort, Mo., 26th; Macon, Mo., 23d; Pierce City, Mo., 25th; Ashley, Mo., 25th; Plattsmouth, Neb., 19th; Genoa, Neb., 5th; Acto, N. J., 4th; Flushing, N. Y., 28th.

Rainy Days.—The number of days on which rain or snow has fallen, varies as follows: New England, 7 to 15; Middle States, 7 to 13; South Atlantic States, 7 to 20; Gulf States, 2 to 18; Ohio valley and Tennessee, 7 to 13; Lower Lake region, 9 to 15; Upper Lake region, 6 to 18; Upper Mississippi valley, 6 13; Lower Missouri valley, 5 to 8; Northwest, 8 to 12; Rocky Mountains, 6 to 11; Western Plateau, 0 to 8; Pacific coast, 0 to 8.

Cloudy Days.—For New England, the number varies from 6 to 13; Middle States, 6 to 14; South Atlantic States, 4 to 15; Gulf States, 2 to 9; Ohio valley and Tennessee, 4 to 6; Lower Lake region, 5 to 9; Upper Lake region, 6 to 13; Upper Mississippi valley, 0 to 9; Lower Missouri valley, 4 to 9; extreme Northwest, 8 to 14; Rocky Mountains, 1 to 11; Western Plateau, 0 to 5.

Snow is reported to have fallen as follows: At Ft. Fred Steele, Wy. Ty., 9th; Summit, Col., 7th, ground about station covered with snow; Boise City, Idaho, 27th, 30th, on Boise Mts.; Winnemucca, Nev., 30th, all the highest peaks in sight capped with snow; Pikes Peak, Col., 1st, 4th, 5th, 6th, 7th, 30th; Marquette, Mich., 21st; Pembina, Dak., 20th; Lead City, Dak., 8th, 9th, 19th; Virginia City, Mont., 7th, on mts., 8th, 24th, 30th; Coalville, Utah, 30th, first snow on mts., SW. of station.

Rain from a Cloudless Sky.—Des Moines, Iowa, 17th.

## RELATIVE HUMIDITY.

The average percentage of relative humidity for the month ranges as follows: New England, 70 to 85; Middle Atlantic States, 68 to 82; South Atlantic States, 75 to 81; East Gulf States, 66 to 78; West Gulf States, 64 to 76; Lower Lake region, 70 to 74; Upper Lake region, 67 to 78; Ohio Valley and Tennessee, 63 to 73; Upper Mississippi valley, 60 to 73; Lower Missouri valley, 61 to 67; Red River of the North valley, 74 to 79; Eastern slope, from Dakota to interior of Texas, 45 to 67; Western Plateau, 23 to 49; California, 41 to 76. High stations report the following, not corrected for altitude: Mt. Washington, 83; Cheyenne, 51; Denver, 44; Santa Fe, 37; Virginia City, 54; Colorado Springs, 46.

## WINDS.

The prevailing winds at the Signal Service stations are shown by arrows on chart No. II, by an examination of which it will be seen that they have been northeasterly in the Atlantic States and generally southerly west of the Alleghanies.

Total Movements of the Air.—The following are the largest monthly movements recorded at the Signal Service stations, viz: Cape Lookout, 12,641 miles; Kittyhawk, 11,385; Portsmouth, N. C., 11,353; Sandy Hook, 10,278; Key West, 10,142; North Platte, 10,018, Cape Hatteras, 10,010; Cape Henry, 9,791; Dodge City, 9,703; Breckenridge, 9,463; Cape May, 9,377; Barnegat, 9,330; Atlantic City, 8,931. The smallest are: Knoxville, 1,380 miles; Visalia, Cal., 1,391; La Mesilla, N. M., 1,642; Nashville, 1,953; Uvalde, Tex., 1,987; Lynchburg, 2,045; Roseburg, Or., 2,069; Eagle Pass, Tex., 2,369; Shreveport, La., 2,797; Virginia City, Mont., 2,820; Fredericksburg, Tex., 2,822. The anemometer on the Summit of Mt. Washington was stopped by frost on the 15th, since when no continuous record has been obtainable.

Local Storms.—5th, New York and vicinity, severe thunder-storm; 3 a. m., house struck by lightning; at Greenpoint, rain fell in torrents; Brooklyn, 4 a. m., oil works struck and fired; at East Marion, house struck by lightning; Jersey City, Railroad washed, and flag pole struck by lightning. 6th, Ardenia, N. Y., afternoon, violent gale, uprooting trees, &c., path hundred yards wide. 12th, Goldsboro, Wayne Co., N. C., "terrific and destructive tornado, passed three miles from city about 7 a. m., path hundred yards wide.